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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/653,764	09/01/2000	Sudhindra P. Herle	SAMS01-00090	6143

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EXAMINER	
SIMITOSKI, MICHAEL J	
ART UNIT	**PAPER NUMBER**
2134	

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/653,764	HERLE, SUDHINDRA P.	
	Examiner	Art Unit	
	Michael J Simitoski	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 September 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The response of 7/6/04 was received and considered.

2. Claims 1-24 are pending.

Response to Arguments

3. In light of applicant's amendments to claims 3, 4, 6, 11, 12, 14, 19, 20 & 22, the rejections of claims 3-7, 11-15 & 19-23 under 35 U.S.C. 112 ¶2 are withdrawn.

4. In light of applicant's amendments to claims 4 & 7, the objections set forth in the previous Office Action are withdrawn.

5. On page 9 of the response filed 7/6/04, applicant states that formal drawings have been submitted, however no formal drawings have been received. Therefore, the objections to the drawings are maintained.

6. Applicant's arguments filed 7/6/04 have been fully considered but they are not persuasive.

7. Hsu discloses a system where a mobile phone is provisioned (software downloaded to the phone) according to the IS-683-A protocol (the software and messages are in IS-683 burst format), where the mobile phone accesses a remote server (provisioning server, via a base station controller, mobile station controller, interworking function unit and TCP/IP network) (Fig. 1). The provisioning data originates in the provisioning servers and is transferred via the TCP/IP network (Fig. 1). Importantly, the IS-683-A message is packetized in accordance with the TCP/IP protocols (col. 6, lines 24-25 & col. 11, lines 50-64). .

8. Applicant argues that Hsu, as modified by IS683A, lacks (p. 10) "a data burst message protocol controller capable of converting said decrypted IP packets to at least one data burst message" and (p. 12) "converting said at least one data burst message into a plurality of encrypted IP packets". However, applicant is directed to col. 6 of Hsu. Hsu discloses recovering TCP/IP packets from CDMA data packets (lines 43-48). Further, applicant is directed to the IS683A reference, where it is stated that the messages (CDMA messages) shall be sent in the CHARi fields of Data Burst Messages. The data burst messages are used to carry the CDMA messages in the system, according to the IS-95 specification. Therefore, the conversion takes place, so as to retrieve the CDMA messages from the Data Burst Messages. Burst messages are a common type of message used in mobile communication and are specifically used in the IS-683A specification to communicate OTASP messages to/from mobile phones. Further, Hsu discloses that a secure link is created using the authenticated code and a public key algorithm, such as the Diffie-Hellman algorithm (col. 15, lines 7-30 & Fig. 4B) (Diffie-Hellman is used to exchange a secret key which is then used to encrypt communications) between the proxy gateway server and the digital telephone.

Drawings

9. New corrected drawings are required in this application because Figures 2 and 3 contain text of inconsistent size and format. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to

avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1, 3-8, 9, 11-16, 17 & 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,587,684 to Hsu et al. (Hsu) in view of "TIA/EIA/IS-683-A: Over-the-Air Service Provisioning of Mobile Stations in Spread Spectrum Systems" (IS683A), May 1998.

Regarding claim 1, Hsu discloses a mobile station/digital telephone communicating with a plurality of base stations in a wireless network (Fig. 1 & col. 2 lines 8-30), and receiving at least one of a software program, a software correction patch and provisioning data (col. 3 lines 55-58 & col. 4 lines 17-40) from a server associated with said wireless network (col. 4 lines 1-9), the mobile station/digital telephone comprising an RF transceiver (Fig. 3) capable of receiving wireless messages from a plurality of base stations and converting said received wireless messages to a plurality of Internet protocol packets (Fig. 3, col. 6 lines 6-25 & 43-56), an encryption controller capable of converting said IP packets from an encrypted format to a decrypted format (col. 15 lines 7-40 & col. 16 lines 18-25) and a data burst message protocol controller/IWF-MSC capable of converting decrypted packets to at least one message (col. 6

lines 6-54). While Hsu does not explicitly disclose a physical encryption controller, it is inherent that one exists to establish the "secure link" stated in col. 15 lines 7-40 to "recover" the payload as stated in col. 16 lines 18-25. Hsu discloses a CDMA transceiver (Fig. 3, col. 2 lines 7-31 & col. 12 lines 53-67), but does not explicitly disclose the data burst message protocol controller capable of converting said decrypted IP packets to at least one *data burst* message. However, IS683A teaches that in CDMA, messages are sent in the fields of Data Burst Messages (page 2-17, §2.3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a data burst message protocol controller to convert the IP packets to data burst messages. One of ordinary skill in the art would have been motivated to perform such a modification to conform to the CDMA standards known in the art, as taught by IS683A (page 2-17, §2.3).

Regarding claims 3, 11 & 19, as best understood, Hsu discloses each of the IP packets comprising information usable by an IP (network) layer and IP packet payload/IP datagram (col. 8 line 49 – col. 11 line 50 & col. 12 lines 8-32).

Regarding claims 4, 12 & 20, as best understood, Hsu discloses communicating packets using the TCP/IP protocol (col. 8 line 49 – col. 11 line 50 & col. 12 lines 8-32).

Regarding claims 5, 7, 13, 15, 21 & 23, as best understood and as modified above, Hsu discloses an over-the-air service-provisioning payload associated with the transmission/burst message (col. 8 line 49 – col. 11 line 50 & col. 13 lines 25-67).

Regarding claims 6, 14 & 22, as best understood, Hsu discloses each of the IP packets comprising information usable by an IP (network) layer and IP packet payload/IP datagram and

communicating packets using the TCP/IP protocol (col. 8 line 49 – col. 11 line 50 & col. 12 lines 8-32).

Regarding claims 8, 16 & 24, Hsu discloses converting decrypted packets (col. 15 lines 7-29) to a data burst message according to the IS-683-A protocol (col. 7 lines 62-67).

Regarding claims 9 & 17, Hsu discloses a system for secure over-the-air administration of a wireless mobile station/digital telephone (Fig. 1 #16) via a base station (Fig. 1 # 14a) in a wireless network (Fig. 1), said system capable of transmitting to said wireless mobile station/digital telephone at least one of a software program, a software correction patch and provisioning data from a server associated with said wireless network (Figs. 1-2 & col. 4 lines 17-54), said system comprising a data burst message protocol controller/IWF-MSC (Fig. 1) capable of receiving and converting said at least one of a software program, a software correction patch and provisioning data into at least one message (col. 6 lines 6-54), an encryption controller capable of converting said at least one message into a plurality of encrypted IP packets (col. 15 lines 7-40) and an RF transceiver (Fig. 1 #14a) to convert IP packets into at least one wireless message and transmitting said at least one wireless message to said wireless mobile station/digital telephone (col. 5 lines 50-64). While Hsu does not explicitly disclose a physical encryption controller, it is inherent that one exists to establish the "secure link" stated in col. 15 lines 7-40 to "recover" the payload as stated in col. 16 lines 18-25. Hsu discloses a CDMA transceiver (col. 6 lines 6-16 & col. 12 lines 53-67), but does not explicitly disclose the data burst message protocol controller capable of converting said decrypted IP packets to at least one *data burst* message. However, IS683A teaches that in CDMA, messages are sent in the fields of Data Burst Messages (page 2-17, §2.3). Therefore, it would have been obvious to one having ordinary

skill in the art at the time the invention was made to include a data burst message protocol controller to convert the IP packets to data burst messages. One of ordinary skill in the art would have been motivated to perform such a modification to conform to the CDMA standards known in the art, as taught by IS683A (page 2-17, §2.3).

12. Claims 2, 10 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu in view of IS683A, as applied to claims 1, 9 & 17 above, in further view of U.S. Patent 6,609,148 to Salo et al. (Salo). Hsu discloses a system, as modified above, but lacks explicit disclosure of IP sec, SSH, SSL or PPTP. However, Salo teaches that the IP Sec standard is known in the art and can provide encryption at the packet-processing layer (col. 13 lines 14-20). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to encrypt and decrypt packets according to the IP Sec tunneling protocol. One of ordinary skill in the art would have been motivated to perform such a modification as it was known in the art to provide packet encryption, as taught by Salo (col. 13 lines 14-20).

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Simitoski whose telephone number is (571) 272-3841. The examiner can normally be reached on Monday - Thursday, 6:45 a.m. - 4:15 p.m.. The examiner can also be reached on alternate Fridays from 6:45 a.m. – 3:15 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached at (571) 272-3838.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington, DC 20231
Or faxed to:
(703)746-7239 (for formal communications intended for entry)
Or:
(571)273-3841 (Examiner's fax, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJS
November 14, 2004

GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100